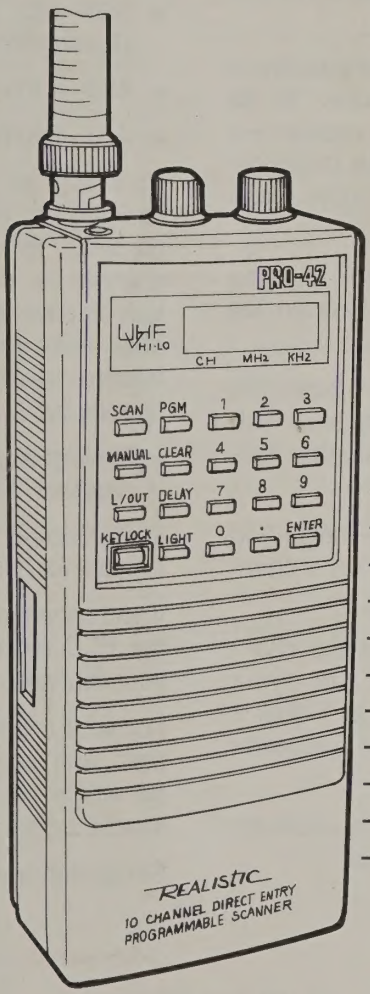
OWNER'S MANUAL

PRO-42
Programmable Scanner

Please read before using this equipment



Cat. No. 20-302

REALISTIC®

INTRODUCTION

Your new Realistic PRO-42 Programmable Scanner lets you in on all the action! This scanner gives you direct access to more than 22,000 frequencies that include police, ambulance, ham radio, and transportation services. You select up to ten channels for your PRO-42 to scan through, and you can change your selection at any time.

The secret to your scanner's ability to scan so many frequencies is its custom-designed microprocessor—a tiny, built-in computer. The microprocessor also gives your scanner these special features:

Front Panel Keyboard – lets you easily enter and change frequencies whenever you want.

Liquid Crystal Display – shows the channel number, the frequency you have selected, and several other indicators.

2–Second Scan Delay – helps you keep from missing replies on a channel while you are scanning.

Memory Backup – keeps the channel frequencies stored in your scanner's memory for up to 1 hour if you unplug the scanner or if a power failure occurs.

Lockout Function – lets the scanner skip over specified channels.

The PRO-42 receives these bands:

- 30—50 MHz (VHF Lo)
- 50—54 MHz (Ham Radio 6m)
- 138—144 MHz (Government)
- 144—148 MHz (Ham Radio 2m)
- 148—174 MHz (VHF Hi)
- 380—450 MHz (Ham Radio and Government)
- 450—470 MHz (UHF Lo)
- 470—512 MHz (UHF Hi)

Your scanner might cause radio or TV interference, even when it is operating properly. To determine whether your scanner is causing the interference, turn off your scanner. If the interference goes away, your scanner is causing the interference. Try to eliminate the interference by;

- Moving your scanner away from the receiver.
- Contacting your local Radio Shack store for help.

If you cannot eliminate the interference, the FCC requires that you stop using your scanner.

For your important records, please record your scanner's serial number in the space below. The serial number is located on the back of the scanner.

Serial Number _____

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CONTENTS

Power Sources 4
- Using Internal Batteries 4
- Using External Power 5
- Charging Nickel-Cadmium Batteries 7
- Resetting the Memory 7

Preparation 8
- Connecting the Antenna 8
- Connecting an Earphone 9
- Connecting an Extension Speaker 9

Operation 10
- Programming the Scanner 10
- Setting the Volume and Squelch 11
- Scanning the Channels 11
- Manually Selecting a Channel 11
- Locking Out a Channel 11
- Locking the Keypad 11
- Lighting the Display 11

A General Guide to Scanning 12
- Birdies 12
- Reception Notes 12
- Guide to the Action Bands 13
- Typical Band Usage 14

Troubleshooting 16

Care and Maintenance 17

Specifications 18

POWER SOURCES

You can power the PRO-42 from any of the following three sources.

- Internal batteries
- Your vehicle's battery (using an optional DC adapter)
- Standard AC power (using an optional AC adapter)

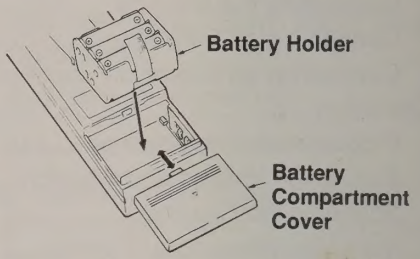
USING INTERNAL BATTERIES

The PRO-42 requires six AA batteries for power. For longest battery life and best performance, we recommend alkaline batteries (Cat. No. 23-552). Or, use rechargeable nickel-cadmium batteries (Cat. No. 23-125). Rechargeable batteries do not last as long on a single charge as alkaline batteries, but you can use rechargeable batteries again and again.

Caution: The PRO-42 has a built-in charging circuit that lets you recharge nickel-cadmium batteries inside the scanner. However, do not use this circuit when you install non-rechargeable batteries in the PRO-42. Be sure to read "External Power Sources" and "Recharging Nickel-Cadmium Batteries."

Installing the Batteries

The PRO-42 uses a removable battery holder to make battery installation easier. You install the batteries in the holder first. Then, you install the holder into the PRO-42's battery compartment. Follow these steps to install or replace the batteries.



1. Remove the battery compartment cover by pressing down on the arrow and sliding off the cover in the direction of the arrow.
2. Remove the battery holder from the battery compartment and install six AA batteries, observing the polarity (+ and –) as marked on the battery holder.
3. Place the battery holder in the battery compartment so that the holder's metal contacts line up with the metal contacts in the battery compartment.

   Be sure the holder's ribbon sticks out when the holder is in the compartment. The ribbon makes it easier for you to remove the holder next time.
4. Replace the battery compartment cover.

Low Battery Indicator

When the batteries get weak, B appears on the display. Immediately replace all six batteries. Or, if you use rechargeable nickel-cadmium batteries, recharge all six batteries.

USING EXTERNAL POWER

The PRO-42 has two external power jacks—**PWR** and **CHG**—and it is important that you understand the purpose of each jack before you connect any adapter to the PRO-42. Improperly using the jacks can damage the scanner or the power adapter.

The **PWR** jack supplies power to operate the scanner and disconnects the internal batteries. You can use this jack with an external power source regardless of what kind of batteries you install in the PRO-42.

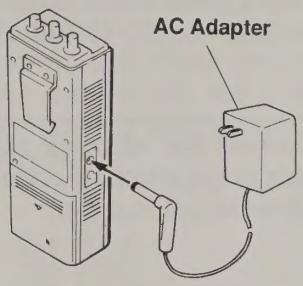
The **CHG** jack supplies power to operate the scanner and also supplies power to recharge the internal batteries. Use the **CHG** jack only when you install nickel-cadmium batteries in the PRO-42.

Warning: Never use the **CHG** jack when you install non-rechargeable batteries (standard, extra-life, or alkaline) in the scanner. If you try to charge non-rechargeable batteries, they get hot and can explode.

If you use only external power, do not leave the scanner unplugged for longer than 1 hour. If you do, your scanner loses all programmed frequencies.

Using an AC Adapter

To power the PRO-42 from AC power you need Radio Shack's AC adapter (Cat. No. 273-1455). Plug the adapter's barrel plug into the **PWR** jack. Then, plug the adapter's power module into a standard AC outlet.



When you finish using the AC adapter, disconnect it from the AC outlet first. Then, disconnect it from the PRO-42.

Note: If you installed rechargeable nickel-cadmium batteries in the PRO-42, you can connect the AC adapter to the **CHG** jack. This powers the PRO-42 and recharges the batteries at the same time. See "Charging-Nickel-Cadmium Batteries."

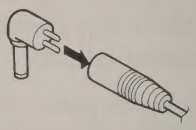
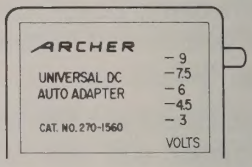
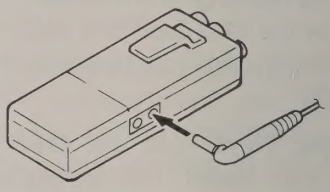
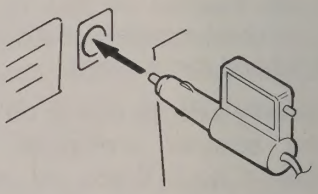
Using a DC Adapter

Warning: Mobile use of a scanner is unlawful or requires a permit in some areas. Check the laws in your area.

You can power the PRO-42 from your vehicle's cigarette-lighter socket, provided the vehicle has a 12-volt, negative-ground electrical system. To do so, you need a Radio Shack Universal DC adapter (Cat. No. 270-1560A).

Notes:

- If you install rechargeable batteries in the PRO-42, you can connect the adapter to the **CHG** jack. This powers the scanner and recharges the batteries. See "Charging Nickel-Cadmium Batteries."
- If the scanner does not properly operate when you use an adapter, unplug the adapter from the lighter socket and remove ashes and other debris.

1. Connect the adapter's blue barrel plug to the adapter's cable with the tip set to negative (–).	
2. Set the adapter's voltage switch to 9 V.	
3. Insert the barrel plug into the PRO-42's **PWR** jack.	
4. Plug the other end of the adapter into your vehicle's cigarette-lighter socket. When you finish using the adapter, disconnect it from the cigarette-lighter first. Then, disconnect it from the PRO-42.	

CHARGING NICKEL-CADMIUM BATTERIES

The PRO-42 has a built-in charging circuit that lets you recharge nickel-cadmium batteries (Cat. No. 23-125). To charge the batteries, connect an AC adapter or a DC adapter to the PRO-42's **CHG** jack.

Warning: Do not connect either adapter to the PRO-42's **CHG** jack if you install non-rechargeable batteries. Non-rechargeable batteries become hot and can explode if you try to recharge them.

It takes about 10 to 18 hours to recharge fully discharged batteries. You can operate the PRO-42 while recharging nickel-cadmium batteries, but the charging time is lengthened.

Charging Tips

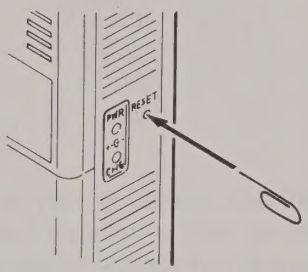
Nickel-cadmium batteries last longer and deliver more power if you occasionally let them fully discharge. To do this, use the scanner until the low battery indicator appears in the display. Then, fully charge the batteries.

Also, never charge the nickel-cadmium batteries when they are extremely hot or cold. If you charge the batteries when they are hot, they can permanently lose their ability to hold power. If you charge the batteries when they are very cold, they do not accept a full charge.

RESETTING THE MEMORY

The scanner's display might lock up the first time you connect power to it, or if a power failure lasts for more than 1 hour. If this occurs, use a pointed object, such as a straightened paper clip, to press **RESET** while the scanner's power is on. The display becomes blank.

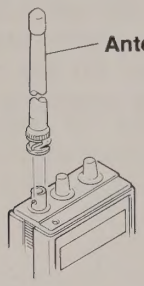
Caution: This procedure clears any information you have programmed into the scanner. Do this only when you are sure the scanner is not working properly.



CONNECTING THE ANTENNA

To attach the flexible antenna to the **ANT** jack on top of your PRO-42, slip the slot in the antenna's connector over the protrusion on the **ANT** jack. Then, rotate the antenna's connector until the antenna locks into place.

Warning: When installing or removing an outdoor antenna, use extreme caution. If the antenna starts to fall, let it go! It could contact overhead power lines. If the antenna touches the power line, contact with the antenna, mast, cable or guy wires can cause electrocution and death! Call the power company to remove the antenna. Do not attempt to do so yourself.



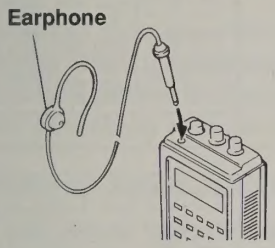
The **ANT** jack makes it easy to use the PRO-42 with a variety of antennas. You can remove the supplied antenna, and attach a different one, such as an external mobile antenna, telescoping antenna, or outdoor base antenna. Radio Shack stores sell the antenna adapters that let you use these antennas.

Use coaxial cable to connect an outdoor antenna. Always use 50-ohm coaxial cable. For lengths over 50 feet, use RG8 low-loss, dielectric coaxial cable.

To improve performance in the 30-50 MHz range, we suggest the center-loaded whip antenna (Cat. No. 20-006).

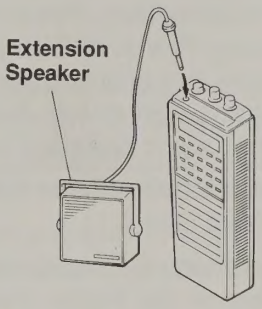
CONNECTING AN EARPHONE

For private listening, plug an earphone into the **EAR** jack on top of your PRO-42. This automatically disconnects the speaker. We recommend Radio Shack's earphone (Cat. No. 33-175). In a noisy environment, mono headphones (Cat. No. 20-210) make listening easier.



CONNECTING AN EXTENSION SPEAKER

In a noisy area, an extension speaker such as Radio Shack Cat. No. 21-549 might provide more comfortable listening. In a vehicle, you can use our amplified speaker (Cat. No. 21-541). Plug the speaker cable's 1/8-inch mini-plug into the **EAR** jack.

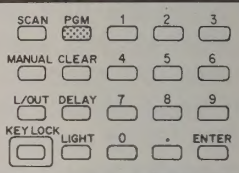
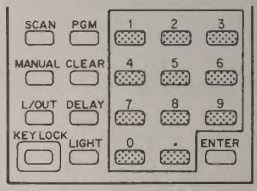
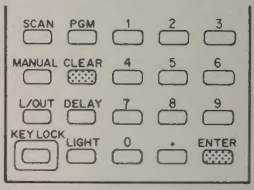
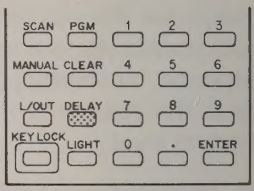
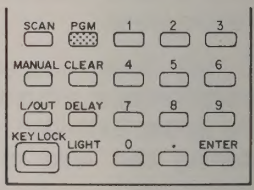


Warnings:

- Always set the volume to its minimum position before you put on an earphone or headphones. Then, adjust the volume to a comfortable listening level.
- Do not wear headphones while operating a motor vehicle. This can create a traffic hazard and is illegal in some areas.
- Do not listen (especially using headphones) at extremely high volume levels. Extended, high-volume listening can lead to permanent hearing loss.

PROGRAMMING THE SCANNER

Follow these steps to program frequencies into your scanner.

1. Repeatedly press **PGM** until the number of the channel you want to program appears on the display.	
2. Enter a frequency. An excellent reference for active frequencies is Radio Shack's *Police Call Radio Guide including Fire and Emergency Services.* We update this directory every year, so be sure to get a current one. Also, refer to "A General Guide to Scanning" in this manual.	
3. Press **ENTER** to store the frequency you entered in Step 2. If you enter an invalid frequency, **ERROR** appears on the display. Press **CLEAR** and repeat Step 2.	
4. If you want the scanner to pause at the end of each transmission, before it continues scanning, press **DELAY** so that a dot appears after the channel number. If you do not want the scanner to pause, press **DELAY** so that the dot disappears from the display.	
5. Press **PGM** to program the next channel. Repeat Steps 2–5 to store additional frequencies (up to 10).	

SETTING THE VOLUME AND SQUELCH

Follow these steps to set the volume and squelch.

1. Turn **VOLUME** and **SQUELCH** fully counterclockwise.
2. Turn **VOLUME** clockwise until you hear a hissing sound.
3. Slowly turn **SQUELCH** clockwise until the hissing stops.

If the scanner picks up unwanted, partial, or very weak transmissions, rotate **SQUELCH** clockwise to decrease the scanner's sensitivity to these signals.

SCANNING THE CHANNELS

After you store frequencies, press **SCAN** to scan the channels for a transmission. The scanner quickly scans the channels until it finds a transmission. When the transmission ends, the scanner resumes scanning.

Note: If you hear hissing between transmissions and the scanner does not scan. Adjust **SQUELCH**.

MANUALLY SELECTING A CHANNEL

To stop scanning and listen to a single channel, press **MANUAL**. Then, press the channel number you want to listen to.

LOCKING OUT A CHANNEL

You can lock out channels you do not want to monitor, such as a continuously transmitted weather channel. To do so, follow these steps.

1. Press **MANUAL**. **MANUAL** appears above the channel number.
2. Enter the channel number you want to lock out.
3. Press **L/OUT**. **L** appears to the right of the channel number.

The scanner now skips the locked-out channel when it scans, but you can still manually select the locked-out channel. (See "Manually Selecting a Channel.")

To unlock a channel, select the channel and press **L/OUT** so that **L** disappears.

LOCKING THE KEYPAD

Once you program your scanner, you can protect it from accidental program changes by pressing **KEY LOCK**. A dash (—) appears on the display. In this mode, the only controls that operate are **LIGHT**, **VOLUME**, **SQUELCH**, **SCAN** and **MANUAL**.

When you want to change the scanner's programming, press **KEY LOCK** again so that the dash (—) disappears from the display.

LIGHTING THE DISPLAY

Press **LIGHT** to help you identify settings in the dark.

BIRDIES

Birdies are frequencies your scanner generates internally that interfere with broadcasts on the same frequencies. This makes it difficult or impossible to hear transmissions on these frequencies. If you program one of these frequencies, you hear only noise on the channel.

If the interference is not severe, you might be able to turn **SQUELCH** clockwise to cut out the interference. The most common birdies to watch for are listed below.

BIRDIES FREQUENCIES

Low Band (MHz)	High Band (MHz)	UHF Band (MHz)
32.095	140.795	384.000
to	140.800	396.800
32.105	140.805	409.600
38.390	140.810	422.400
38.395	143.430	435.200
38.400	to	448.000
38.405	143.440	460.800
38.410	153.595	486.400
39.995	153.600	
to	153.605	
40.005	153.675	
40.880	to	
to	153.690	
40.890	166.395	
41.455	166.400	
to	166.405	
41.465	166.410	
44.235		
to		
44.240		
44.715		
to		
44.725		
51.195		
51.200		
51.205		
51.210		

RECEPTION NOTES

Reception on the frequencies covered on your scanner is mainly *line-of-sight.* That means that you usually cannot hear stations at your listening location that are located beyond the horizon.

During summer months, you might be able to hear stations in the 30–50 and 144–148 MHz ranges that are located several hundred or even thousands of miles away. This is due to summer atmospheric conditions. This type of reception is unpredictable, but often very interesting.

One useful service is the National Oceanic Atmospheric Administration (NOAA) Weather Radio's continuous weather broadcasts. These broadcasts include weather forecasts and data for the area around the station, plus bulletins on any threatening weather conditions. These stations broadcast on three frequencies—162.40, 162.475, and 162.55 MHz. In most areas of the country, you can receive one or more of these frequencies.

GUIDE TO THE ACTION BANDS

With the right frequencies programmed into your scanner, you can monitor exciting events. With a little investigation, you can find active frequencies in your community. We can give you some general pointers, and you can take it from there. Please use caution and common sense when you hear an emergency call. Never go to the scene of an emergency—it could be the most dangerous thing you could ever do.

Find out if there is a local club that monitors your community's frequencies. Perhaps a local electronics repair shop that works on equipment similar to your scanner can give you channel frequencies used by local radio services. A volunteer police or fire employee can also be a good source of this information.

As a general rule, most VHF activity is concentrated between 153.785 and 155.98 MHz and then again between 158.73 and 159.46 MHz. Here you find local government, police, fire, and most emergency services. If you are near a railroad or major railroad tracks, look around 160.0 to 161.9 for signals.

In some large cities, there has been a move to the UHF bands for emergency services. Here, most of the activity is between 453.025 and 453.95 MHz and between 456.025 and 467.925 MHz.

In the UHF band, frequencies between 456.025 and 459.95 MHz and between 465.025 and 469.975 MHz are used by mobile units and control stations associated with base and repeater units that operate 5 MHz lower (that is, 451.025 to 454.95 MHz and 460.025 to 464.975 MHz). This means that if you find an active frequency inside one of these spreads, you can look 5 MHz lower (or higher) to find the base station/repeater for that service.

In each band, you can only access frequencies at specific intervals. In the VHF-Lo, Ham, Government, and VHF-Hi Bands, frequencies are available in 5 kHz steps. In all other bands, frequencies are available in 12.5 kHz steps. Your scanner rounds the entered frequency down to the nearest valid frequency. For example, if you try to enter 151.473, the scanner accepts this as 151.470 MHz.

TYPICAL BAND USAGE

The following is a brief listing of the typical services that use the bands your scanner can receive. This listing helps you decide which ranges you would like to scan.

Abbreviations:

BA.....Remote Broadcast(Radio & TV)
CA.....General Mobile(Radio)
CAP.....Civil Air Patrol
IB.....Business
IF.....Forest Products
IM.....Motion Picture Industry
IP.....Petroleum Industry
IS.....Special Industrial (Construction, farming, etc.)
IT.....Telephone Maintenance
IW.....Power and Water Utilities
IX.....Manufacturers
IY.....Relay Press(newspaper reporters)
LA.....Automotive Emergency (tow trucks)
LJ.....Motor Carrier, Trucks
LR.....Railroad
LU.....Motor Carrier, Buses
LX.....Taxi
MC.....Maritime Limited Coast (private stations)
MG.....Maritime Government (Coast Guard)
MP...Maritime Public Coast (marine telephone)
MS.....Maritime Shipboard
PF.....Fire
PH.....Highway Maintenance
PL.....Local Government
PM.....Medical Services
PO.....Forestry Conservation
PP.....Police
PS.....Special Emergency
RA.....Mobile Telephone (aircraft)
RC.....Mobile Telephone (radio common carrier)
RT.....Mobile Telephone (landline companies)
BIFC.....Boise Interagency Fire Cache

Government Agencies:

UAF.....Air Force
UAR.....Army
UBW.....International Boundary .....& Water Commission
UCE.....Environmental Research Laboratories
UCF.....Maritime Fisheries Service
UCG.....Coast Guard

These frequencies can change, and might vary from area to area. For a more complete listing, refer to the *Police Call Radio Guide including Fire and Emergency Services*, at your local Radio Shack store.

UCM.....Maritime Administration
UCO.....Ocean Survey
UCP.....National Capitol Police
UCW.....National Weather Service
UCX.....Department of Commerce
UEP.....Environmental Protection Agency
UER.....Department of Energy
UFA.....Federal Aviation Administration
UFC.....Federal Communications Commission
UGC.....Soil Conservation Service
UGF.....Forest Service
UGS.....General Services Administration
UGX.....Department of Agriculture
UHW.....Dept. of Health and Human Services
UIB.....Bonneville Power Administration
UIF.....Bureau of Sport Fisheries and Wildlife
UIG.....Geological Survey
UII.....Bureau of Indian Affairs
UIL.....Bureau of Land Management
UIM.....Bureau of Mines
UIP.....National Park Service
UIR.....Bureau of Reclamation
UIS.....Southwestern Power Administration
UIX.....Department of the Interior
UNO.....United Nations
UNS.....NASA
UPO.....Postal Service
USA.....Federal Govt. Misc.
USD.....State Department
USN.....Navy
UTC.....Bureau of Customs
UTM.....Bureau of the Mint
UTR.....Department of Transportation
UTV.....Tennessee Valley Authority
UTX.....Treasury Department
UVA.....Veterans Administration
UXX.....Classified

Abbreviations used by permission of the publishers of *Police Call Radio Guide*, © Hollins Radio Data.

Band Usage:

30–50 MHz:

30.00–30.55.....USA,UAR,USN,UCG,UAF
30.58–31.98.....IS,IP,IB,LU,PO
32.00–32.99.....USA,UAR,USN,UCG,UGX, UAF,UIR
33.02–33.98.....PS,PH,IS,IB,IP,PF
34.01–34.99.....UCG,UER,USA,UAR,UAF, USN,UGX,UIP,UIF
35.02–35.98.....IB,IT,RC,RT,IS,PS
36.01–36.99.....UIX,UER,USA,UAR,USN,UTR, UCO,IP,UHW,UGF,UGX,UAF
37.02–37.98.....PP,PL,IW,PH,PS
38.27–38.99.....USA,USN,UGX,UGF,UAR, UAF,UIX,UTV,UVA
39.02–39.98.....PP,PL
40.01–41.99 UIA,UAR,UIP,UAF,USA,UVA,UER, USN,UIF,UIR,UTV,UIM,IP,UIX,UEP UCG,UIL,BIFC,UHW,UTX
42.02–42.94.....PP
42.96–43.68.....IB,IS,IT,RC,RT,PS
43.70–44.60.....LU,LJ
44.62–46.58.....PP,PO,PL,PH,PF,PS
46.61–46.99.....USA,UIL,BIFC,UAF,UAR, UGX,UGF
47.02–49.58.....PH,PS,IS,IW,IF,IP
49.61–49.99.....UIL,UAR,UGC,UAF,UAR, UGX,UGF,USA

150–173 MHz:

150.775–151.985.....PM,LA,IF,PH,PO,IS,IB
152.0075–152.84.....PM,RC,LX,IF,IB,RT
152.87–153.725.....IM,IS,IP,IX,IF,IW
153.74–156.24.....PL,PF,IS,IB,PP,PM,PH
156.255–157.45.....IP,MC,MS,MG,MP,PM
157.47–158.70.....LA,LX,IF,IS,IB,RT,IW,IP, IX,IT,RC
158.73–159.48.....PP,PL,PH,PO,IP
159.495–161.565.....LR,LJ
161.58–162.00.....IP,MC,BA,MP
162.025–173.9875.....Misc. Govt. Agencies

406–512 MHz:

406.125–419.975 ..... Misc. Govt. Agencies
450.05–450.925 ..... BA
451.00–451.70 ..... IW,IF,IP,IT,IX
451.725–452.175 ..... IS,IF,IP,LX
452.20–452.95 ..... LX,LJ,LR,LA
452.975–453.975 ..... IY,PL,PH,PF,PO,PP
454.00–457.60 ..... IP,RC,RT,RA,BA,IB
458.025–467.925 ....PM,PP,IB,IX,IF,IP,IT,IW,GM
482.00–508.9875 ..... Mixed Public Safety

You might discover some of your regular stations on frequencies that are not listed. These might be what are known as images. For example, a service you normally hear on 453.2750 might also be heard on 474.6750. To find out if you tuned to an image, double the intermediate frequency of 10.7 MHz and subtract that number (21.4) from the new frequency. If the answer is the regular frequency, you tuned to an image.

Note: If you listen to a weak or distant broadcast, you might occasionally get interference from a strong broadcast that is 21.4 MHz below the tuned frequency. This is rare, and the signal usually clears when the broadcast on the actual frequency is in progress.

TROUBLESHOOTING

We hope you don't have any problems with your scanner, but if you do, the following suggestions might help.

Problem	Cause and Solution
The scanner does not function.	Batteries are not correctly installed—check to be sure the + and – terminals are properly aligned. Batteries are dead—replace with new ones.
No reception or poor reception.	The antenna is not properly installed—check the connector. The area is not suitable for the scanner—relocate the scanner and try again. Frequencies are not properly programmed—check and reprogram. Batteries are weak or dead—replace with new ones.
ERROR appears on the display.	Programming error—check the frequency and reprogram if necessary.
Frequency is not accepted.	If no error is displayed, you entered a frequency between the steps. Your scanner rounds invalid frequencies down to the nearest valid frequency. Enter a correct frequency.

If none of these suggested solutions solves the problem, take the scanner to your local Radio Shack store so that our personnel can assist you.

CARE AND MAINTENANCE

Your PRO-42 Programmable Scanner is an example of superior design and craftsmanship. The following suggestions will help you care for the scanner so that you can enjoy it for years.

Keep the scanner dry. If it does get wet, wipe it dry immediately. Liquids can contain minerals that destroy electronic circuits.

Use only fresh batteries of the recommended size and type. Always remove old or weak batteries. They can leak chemicals that destroy electronic circuits.

Handle the scanner gently and carefully. Dropping it can damage its circuit board and case and can cause the scanner to work improperly.

Use and store the scanner only in normal temperature environments. Temperature extremes can shorten the life of electronic devices and distort or melt plastic parts.

Keep the scanner away from dust and dirt, which can cause premature wear of parts.

Wipe the scanner with a dampened cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the scanner.

Modifying or tampering with your scanner's internal components can cause a malfunction and might invalidate the scanner's warranty and void your FCC authorization to operate it. If your scanner is not performing as it should, take it to your local Radio Shack store. Our personnel can assist you and arrange for service if needed.

SPECIFICATIONS

Frequency Coverage:
- VHF-Lo ..... 30–50 MHz (in 5 kHz steps)
- Ham ..... 50–54 MHz (in 5 kHz steps)
- Government ..... 138–144 MHz (in 5 kHz steps)
- Ham ..... 144–148 MHz (in 5 kHz steps)
- VHF-Hi ..... 148–174 MHz (in 5 kHz steps)
- Ham/Government ..... 380–450 MHz (in 12.5 kHz steps)
- UHF-Lo ..... 450–470 MHz (in 12.5 kHz steps)
- UHF-Hi ..... 470–512 MHz (in 12.5 kHz steps)

Sensitivity (20 dB S/N at 3 kHz Deviation):
- 30–54 MHz ..... 1.0 μV
- 138–174 MHz ..... 1.0 μV
- 380–512 MHz ..... 1.0 μV

Spurious Rejection:
- 30–54 MHz ..... 50 dB at 40 MHz
- 138–174 MHz ..... 50 dB at 154 MHz
- 380–512 MHz ..... Not specified

Selectivity ..... –6 dB, ±10kHz
–50 dB, ±20 kHz

IF Rejection ..... 10.7 MHz –50 dB at 154 MHz

Scanning Rate ..... 8 channels/sec.

Delay Time ..... 2 seconds

Modulation Acceptance ..... ±8 kHz

IF Frequencies ..... 10.7 MHz and 455 kHz

Filters ..... One Crystal, One Ceramic

Squelch Sensitivity:
- Threshold ..... Less than 1.0 μV
- Tight ..... (S+N)/N 25 dB

Antenna Impedance ..... 50 ohms

Audio Power ..... 250 mW maximum

Power Requirements ..... +9 V DC, 6 AA batteries, or a suitable adapter (negative ground only)

Dimensions ..... $6\ ^{3}/_{8} \times 2\ ^{3}/_{4} \times 1\ ^{5}/_{8}$ inches (160 x 70 x 40 mm)(HWD)

Weight ..... 10. 6 oz (300 g)

U.S. PATENT NUMBERS

3,794,925

3,961,261 4,027,251

3,962,644 4,092,594 4,123,715

NOTES

RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 1 year from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your Radio Shack sales slip** as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell

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